



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

**REGION IX**

**75 Hawthorne Street**

**San Francisco, CA 94105-3901**

Ms. Lorilee Crisostomo  
Administrator  
Guam Environmental Protection Agency  
P.O. Box 22439 GMF  
Barrigada, Guam 96921

Subject: Approval of Guam's 2008 Section 303(d) List

Dear Ms. Crisostomo:

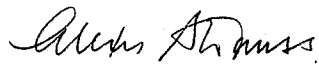
Thank you for submitting Guam's 2008 integrated water quality monitoring and assessment report containing the Clean Water Act Section 303(d) list of water quality limited water bodies and the Section 305(b) report. The final submittal and supporting documentation were received on May 29, 2009. Based on review of the final submittal, EPA has determined that Guam's 2008 list of water quality limited segments (WQLSs) still requiring TMDLs meets the requirements of Section 303(d) of the Clean Water Act and EPA's implementing regulations; therefore, EPA hereby approves Guam's 2008 Section 303(d) list. The statutory and regulatory requirements, and a summary of EPA's review of Guam's compliance with each requirement, are described in the enclosure.

Guam's 2008 303(d) list submittal includes 54 water body segments. The listings were based on an assessment methodology described in the submittal. Priority rankings for all listed waters are established as required by Section 303(d) and its implementing regulations (40 CFR 130.7). Forty-three high priority waterbodies are targeted for TMDL development, based on the importance of the uses to be made of the water, the magnitude of exceedances, and other priority ranking factors. Sixteen high priority bacteria TMDLs are currently being prepared. We will continue to work with your staff to ensure that these TMDLs are completed and submitted in the near future.

The public participation process sponsored by Guam's Environmental Protection Agency included a solicitation of public comment through their website and newspaper advertisements. A thirty-day comment period ended on May 28, 2009. No comments were received from the public.

Thank you for your efforts to produce an Integrated Report of Water Quality in 2008. If you have questions concerning EPA's decision, feel free to call me at (415) 972-3572 or contact Anna Sofranko at (415) 972-3454.

Sincerely,

 1 June 2009  
Alexis Strauss  
Director, Water Division

Enclosure

## **Review of Guam's 2008 Section 303(d) Water Body List**

*Enclosure to letter from Alexis Strauss, EPA Region 9 to Lorilee Crisostomo, Guam EPA*

Date of Submittal: May 29, 2009

### **Purpose**

The purpose of this review document is to describe the rationale for EPA's approval of Guam's 2008 Section 303(d) list of water quality limited waters. The following sections identify those key elements to be included in the list submittal based on the Clean Water Act and EPA regulations. See 40 CFR §130.7. EPA reviewed the methodology used by Guam in developing the 2008 303(d) list and the Territory's description of the data and information it considered. EPA's review of Guam's 2008 303(d) list is based on EPA's analysis of whether Guam reasonably considered existing and readily available water quality-related data and information and reasonably identified waters required to be listed.

### **Statutory and Regulatory Background**

#### **Identification of Water Quality Limited Segments (WQLSs) for Inclusion on Section 303(d) List**

Section 303(d)(1) of the Act directs each State and Territory to identify those waters within its jurisdiction for which effluent limitations required by Section 301(b)(1)(A) and (B) are not stringent enough to implement any applicable water quality standard, and to establish a priority ranking for such waters, taking into account the severity of the pollution and the uses to be made of such waters. The Section 303(d) listing requirement applies to waters impaired by point and/or nonpoint sources, pursuant to EPA's long-standing interpretation of Section 303(d).

EPA regulations provide that Territories do not need to list waters where the following controls are adequate to implement applicable standards: (1) technology-based effluent limitations required by the Act, (2) more stringent effluent limitations required by the Territory, and (3) other pollution control requirements required by the Territory, local, or federal authority. See 40 CFR 130.7(b)(1).

#### **Consideration of Existing and Readily Available Water Quality-Related Data and Information**

In developing Section 303(d) lists, Territories are required to assemble and evaluate all existing and readily available water quality related data and information, including, at a minimum, consideration of existing and readily available data and information about the following categories of waters: (1) waters identified as partially meeting or not meeting designated uses, or as threatened, in the Territory's most recent Section 305(b) report; (2) waters for which dilution calculations or predictive modeling indicate non-attainment of applicable standards; (3) waters for which water quality problems have been reported by governmental

agencies, members of the public, or academic institutions; and (4) waters identified as impaired or threatened in any Section 319 nonpoint assessment submitted to EPA. See 40 CFR 130.7(b)(5). In addition to these minimum categories, Territories are required to consider any other data and information that is existing and readily available. EPA's 1991 Guidance for Water Quality-Based Decisions describes categories of water quality-related data and information that may be existing and readily available. See Guidance for Water Quality-Based Decisions: The TMDL Process, EPA Office of Water, 1991, Appendix C ("EPA's 1991 Guidance"). While Territories are required to evaluate all existing and readily available water quality-related data and information, Territories may decide to rely or not rely on particular data or information in determining whether to list particular waters.

In addition to requiring Territories to assemble and evaluate all existing and readily available water quality-related data and information, EPA regulations at 40 CFR 130.7(b)(6) require Territories to include, as part of their submittals to EPA, documentation to support decisions to rely or not rely on particular data and information and decisions to list or not list waters. Such documentation needs to include, at a minimum, the following information: (1) a description of the methodology used to develop the list; (2) a description of the data and information used to identify waters; and (3) any other reasonable information requested by the Region.

### Priority Ranking

EPA regulations also codify and interpret the requirement in Section 303(d)(1)(A) of the Act that Territories establish a priority ranking for listed waters. The regulations at 40 CFR 130.7(b)(4) require Territories to prioritize waters on their Section 303(d) lists for TMDL development, and also to identify those WQLSs targeted for TMDL development in the next two years. In prioritizing and targeting waters, Territories must, at a minimum, take into account the severity of the pollution and the uses to be made of such waters. See Section 303(d)(1)(A). As long as these factors are taken into account, the Act provides that Territories establish priorities. Territories may consider other factors relevant to prioritizing waters for TMDL development, including immediate programmatic needs, vulnerability of particular waters as aquatic habitats, recreational, economic, and aesthetic importance of particular waters, degree of public interest and support, and Territory or national policies and priorities. See 57 FR 33040, 33045 (July 24, 1992), and EPA's 1991 Guidance.

## **Analysis of Guam's Submittal**

### Identification of Waters and Consideration of Existing and Readily Available Water Quality Related Data and Information.

EPA has reviewed Guam's submittal, and has concluded the Territory developed its Section 303(d) list in compliance with Section 303(d) of the Act and 40 CFR 130.7. EPA's review is based on its analysis of whether the Territory reasonably considered existing and readily available water quality related data and information and reasonably identified waters required to be listed.

Guam assembled data and information from the Territory's water quality monitoring program as well as several other sources of water quality information. In developing this list, Guam reviewed previous listing information and recent data (1997-2007). In several locations this information was used to change prior listings for broad impairments such as bacteria, nutrients, volatile organic compounds, metals, or pesticides to a more specific counterpart such as enterococcus, nitrate, trichloroethylene, aluminum or chlordane.

Fifty one waterbodies were carried over to the 2008 303(d) list from the 2006 list; three waterbodies were added. Lonfit River section GUPGRL-2 was added to the 2008 list and a prior listing for "leachate" at Lonfit River section GUPGRL-1-51B has now been replaced with more specific impairments. Cocos Lagoon was added to the 2008 list for contamination of fish tissue by PCBs. A tributary stream to Pago River called Landfill Leachate Stream (GUPGRL-0) was added to the 2008 list for E. coli, nitrate, and dissolved oxygen.

Additionally prior segments that included both bay and river waters have been separated into separate segments in this list. Agana River and Bay (GU-2) have been separated into Hagatna River (GUAGRA-3) and the beaches comprising Hagatna Bay (Dungca's Beach – Sleepy Lagoon GUN-6, Dungca's Beach GUN-7, East Hagatna Bay – Trinchera Beach GUN-8, East Hagatna Bay – Alupang Beach Towers GUN-26, and East Hagatna Bay - Padre Palomo GUN-9). This resegmentation is appropriate as there has been no monitoring of the bay itself. Pago River and Bay (GU-1) and a Pago River segment (GUPGRP-1) were further resegmented to be two Pago River segments (GUPGRP-1 and GUPGRP-2), a Pago River tributary segment called Landfill Leachate Stream (GUPGRL-0) and Pago Bay (GUG-003A). Guam and EPA exchanged numerous communications to reach clarification and agreement on each of these revisions.

Guam did not include 18 water body-pollutant combinations on the 2008 303(d) list because analysis of available monitoring data supported a conclusion that applicable standards were no longer exceeded. EPA asked Guam to provide rationale for its decision not to include on its 2008 Section 303(d) list several waters that were included on its 2006 Section 303(d) list. The Territory demonstrated to EPA's satisfaction good cause for not listing each of the waters. See, 40 CFR 130.7(b)(6)(iv).

Guam determined not to include Dungca's Beach–Sleepy Lagoon (GU-N-06), Dungca's Beach (GU-N-07), East Hagatna Bay-Trinchera Beach (GU-N-08), East Hagatna Bay –Alupang Beach Towers (GU-N-26), East Hagatna Bay- Padre Palomo (GU-N-09), Hagatna River (GU-AGRA-3), Pago Bay (GU-G-003A), Pago River 1 (GU-PGRP-1), and Pago River 2 (GU-PGRP-2) on its 2008 Section 303(d) list for turbidity based on a previous misinterpretation of standards. Guam determined not to include Dungca's Beach–Sleepy Lagoon (GU-N-06), Dungca's Beach (GU-N-07), East Hagatna Bay-Trinchera Beach (GU-N-08), East Hagatna Bay –Alupang Beach Towers (GU-N-26), East Hagatna Bay- Padre Palomo (GU-N-09), and Pago River 1 (GUPGRP-1) on its 2008 Section 303(d) list for dissolved oxygen based on a reevaluation of the original listing data and a resegmentation of waterbodies, most notably the separation of Agana River and Bay. Tumon Bay (GU-G-001C) was not listed for bacteria in the 2008 303(d) list based on a review of original listing data and the bacteria impairment has been included in individual

beaches comprising Tumon Bay (GU-N-2, GU-N-3, GU-N-4, GU-N-5, GU-N-23). Tumon Bay (GU-G-001C) was also delisted for nutrients due to a reevaluation of historical data. Guam determined not to include Pago River and Bay (GU-1) (now the section named Pago River 2, GUPGRP-2) on its 2008 Section 303(d) list for nutrients because the nutrient-related impairment is solely associated with the newly added Landfill Leachate Stream. EPA requested that the Territory provide a more detailed rationale to support these conclusions, which the Territory provided. EPA concurs with Territory's resegmentation and reassessment of the above mentioned water body-pollutant combinations.

The Territory considered each of the data and information sources identified in 40 CFR 130.7(b)(5). The Territory applied a straightforward set of listing criteria that closely follow EPA's 1997 and 2002 assessment methods recommendations. EPA concludes that the listing criteria are consistent with federal listing requirements and that those criteria were applied in a consistent and reasonable manner in compiling the list.

EPA has reviewed Guam's 2008 Integrated Report, which provides comprehensive information on waters in Guam and fulfills reporting requirements of the Clean Water Act sections 303(d), 305(b), and 314. EPA concludes the Territory followed EPA's 2006 Integrated Report guidance and properly assembled and evaluated all existing and readily available data and information, including data and information relating to the categories of waters specified in 40 CFR 130.7(b)(5).

The Territory properly listed waters with nonpoint sources causing or expected to cause impairment, consistent with Section 303(d) and EPA guidance. Section 303(d) lists are to include all WQLSs still needing TMDLs, regardless of whether the source of the impairment is a point and/or nonpoint source. EPA's long-standing interpretation is that Section 303(d) applies to waters impacted by point and/or nonpoint sources. In *Pronsolino v. Marcus*, the District Court for the Northern District of California held that section 303(d) of the Clean Water Act (CWA) authorizes EPA to identify and establish total maximum daily loads (TMDLs) for waters impaired by nonpoint sources. *Pronsolino et al. V. Marcus et al.*, 91 F.Supp.2d 1337, 1347 (N.D.Ca. 2000), *aff'd*, *Pronsolino v. Nastri*, 291 F.3d 1123 (9<sup>th</sup> Cir 2002). See also EPA's 1991 Guidance and National Clarifying Guidance for 1998 Section 303(d) Lists, Aug. 27, 1997.

#### Priority Ranking and Targeting

EPA also reviewed the Territory's priority ranking of listed waters for TMDL development, and concludes that the Territory properly took into account the severity of pollution and the uses to be made of such waters, as well as other relevant factors such as the fit of TMDL work with other assessment, planning and pollution control activities planned by the Territory and the degree of public concern about the water body. In addition, 16 of the 43 WQLSs identified as high priority for TMDL adoption, currently have a TMDL in development. EPA would like these TMDLs to be completed and submitted in the near future.

### Administrative Record Supporting This Action

In support of this decision to approve Guam's listing decisions, EPA carefully reviewed the materials submitted by the Territory with its 303(d) listing decision. The administrative record supporting EPA's decision is comprised of the integrated assessment report and supporting documentation submitted by the Territory, associated federal regulations, EPA guidance concerning preparation of Section 303(d) lists, and this decision letter and supporting staff report. EPA determined that the materials provided by the Territory with its submittal provided sufficient documentation to support our analysis and findings that the Territory listing decisions meet the requirements of the Clean Water Act and associated federal regulations. We are aware that the Territory compiled and considered additional materials (e.g. raw data and water quality analysis reports) as part of its list development process that were not included in the materials submitted to EPA. EPA did not consider these additional materials as part of its review of the listing submittal. It was unnecessary for EPA to consider all of the materials considered by the Territory in order to determine that, based on the materials submitted to EPA by the Territory, the Territory complied with the applicable federal listing requirements. Moreover, federal regulations do not require the Territory to submit all data and information considered as part of the listing submittal.

## References

The following list of documents were used directly or indirectly as a basis for EPA's review of the Territory's 303(d) water body list. This list is not meant to be an exhaustive list of all records reviewed, but to provide the primary documents the Region relied upon in making its decisions to approve the Territory's list.

Final Submittal of Guam 305(b), 303(d) Integrated Report, Letter and Enclosure from Margaret Aguilar to Anna Sofranko, May 29, 2009.

December 28, 1978 Federal Register Notice, *Total Maximum Daily Loads Under Clean Water Act*, finalizing EPA's identification of pollutants suitable for TMDL calculations, 43 Fed. Reg. 60662.

January 11, 1985 Federal Register Notice, *40 CFR Parts 35 and 130, Water Quality Planning and Management: Final Rule*, 50 Fed. Reg. 1774

April 1991, "Guidance for Water Quality-Based Decisions: The TMDL Process," EPA 440/4-91-001.

July 24, 1992 Federal Register Notice, *40 CFR Parts 122, 123, 130*, revision of regulation, 57 Fed. Reg. 33040

40 CFR Part 130 Water Quality Planning and Management

September, 1997 guidance from Office of Water, Headquarters, US EPA regarding Guidelines for Preparation of the Comprehensive State Water Quality Assessments (305(b) Reports) and Electronic Updates: Supplement, EPA-841-B-97-002B

Consolidated Assessment and Listing Methodology, EPA Office of Water, July 2002

Guidance for 2006 Assessment, Listing and Reporting Requirements Pursuant to Sections 303(d), 305(b) and 314 of the Clean Water Act, Diane Regas, EPA Office of Wetlands, Oceans, and Watersheds, July 29, 2005.

Information Concerning 2008 Clean Water Act Sections 303(d), 305(b), and 314 Integrated Reporting and Listing Decisions, Diane Regas, EPA Office of Wetlands, Oceans, and Watersheds, October 12, 2006